Examiner's Amendment

PROCESS FOR PREPARING HYDROFLUOROETHERS

ABSTRACT

Process for obtaining hydrofluoroethers of formula (I):

$$A\text{-}(R_f)_{n0}\text{-}CF(R_{f1})\text{-}O\text{-}R_h \qquad (I)$$

~~wherein: n0 is zero or 1; R_f is a bivalent radical: C_1-C_{20} (per)fluoroalkylene, optionally containing one or more oxygen atoms; -CFW'O-(R_{f2})-CFW-, wherein W and W', equal or different, are F, CF_3; R_{f2} is a (per)fluoropolyoxyalkylene; R_{f1} is F or a C_1-C_{10} (per)fluoroalkyl or (per)fluoro-oxyalkyl radical; R_h is a C_1-C_{20} linear, branched, saturated or unsaturated alkyl, or C_7-C_{20} alkylaryl, A = F, (R_{h2}O)-CF(R_{f4})-, -C(O)F, wherein R_{h2}, equal to or different from R_h, has the R_h meanings and R_{f4}, equal to or different from R_{f1}, has the R_{f1} meanings;~~

wherein a mono- or bifunctional carbonyl compound of formula (IV):

$$B\text{-}R_f\text{-}C(O)R_{f1} \qquad (IV)$$

~~B being F or -C(O)R_{f4}, R_f, R_{f1} and R_{f4} being as above,~~ is reacted with at least one equivalent of a fluoroformate of formula (III):

$$R\text{-}OC(O)F \qquad (III)$$

~~wherein R = R_h or R_{h2} as above defined;~~

in the presence of an ion fluoride compound (catalyst) and of a dipolar aprotic organic compound, liquid and inert under the reaction conditions.

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R_{f1} is F or a C_1-C_{10} (per)fluoroalkyl or (per)fluoro-oxyalkyl radical;

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